



Michigan Department of Environmental Quality
Waste and Hazardous Materials Division

SOLID WASTE DISPOSAL AREA OPERATING LICENSE

This license is issued under the provisions of Part 115, Solid Waste Management, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended, MCL 324.11501 et seq., and authorizes the operation of this solid waste disposal area (Facility) in the state of Michigan. This license does not obviate the need to obtain other authorizations as may be required by state law.

FACILITY NAME: Carleton Farms Landfill

LICENSEE/OPERATOR: Republic Services of Michigan I, LLC

FACILITY OWNER: Republic Services of Michigan I, LLC

PROPERTY OWNER: Republic Services of Michigan I, LLC

FACILITY TYPE(S): Municipal Solid Waste Landfill and Municipal Solid Waste Incinerator Ash Landfill

FACILITY ID NUMBER: 390701

COUNTY: Wayne

LICENSE NUMBER: 9182

ISSUE DATE: July 29, 2008

EXPIRATION DATE: July 29, 2013

FACILITY DESCRIPTION: The Carleton Farms Landfill, a Municipal Solid Waste Landfill and Municipal Solid Waste Incinerator Ash Landfill, consists of 664.08 acres located at 28800 Clark Road, Section 36, Sumpter Township, Wayne County, Michigan, as identified in Attachment A and fully described in this license.

AREA AUTHORIZED FOR DISPOSAL OF SOLID WASTE: Identified in Item 2.

RESPONSIBLE PARTY: Mr. Scott Johnson, General Manager
Republic Services of Michigan I, LLC
28800 Clark Road
New Boston, Michigan 48164
734-654-3615

RENEWAL OPERATING LICENSE: This License Number 9182 supersedes and replaces Solid Waste Disposal Area License Number 9162 issued to Republic Services of Michigan I, LLC on June 22, 2007.

This license is subject to revocation by the Director of the Michigan Department of Environmental Quality if the Director finds that this Facility is not being constructed or operated in accordance with the approved plans, the conditions of a permit or license, Part 115, or the rules promulgated under Part 115. Failure to comply with the terms and provisions of this license may result in legal action leading to civil and/or criminal penalties pursuant to Part 115. This license shall be available through the licensee during its term and remains the property of the Director.

THIS LICENSE IS NOT TRANSFERABLE.

Steven R. Sliver, Chief, Storage Tank and Solid Waste Section
Waste and Hazardous Materials Division

Licensee: Republic Services of Michigan I, LLC
Facility Name: Carleton Farms Landfill
Operating License Number: 9182
Issue Date: July 29, 2008

The licensee shall comply with all terms of this license and the provisions of Part 115 and its administrative rules. This license includes the license application and any attachments to this license.

1. The licensee shall operate the Facility in a manner that will prevent violations of any state or federal law.
2. The following portions of the Facility are authorized to receive solid waste by this license:
 - a. **ACTIVE PORTIONS NOT AT FINAL GRADE:** The area(s) identified as Cells 1A (5.73 acres), 2A (6.38 acres), 3A (6.55 acres), 4A (6.81 acres), 5A (6.81 acres), 6A (6.81 acres), 201 (6.14 acres), 202 (5.97 acres), 203 (8.94 acres), 204 (8.97 acres), 205 (10.47 acres), 206 (12.04 acres), 207 (17.3 acres), 209 (23.67 acres), 210 (15.54 acres), 211 (15.51 acres), 301 (9.02 acres), 1B (3.09 acres), 2B (6.5 acres), 3B (7.33 acres), and 4B (7.34 acres) were authorized to receive waste by the previous license. This area's total acreage is 196.92 acres.
3. The following portions of the Facility **WILL BE** authorized to receive solid waste by this license following approval by the Michigan Department of Environmental Quality (MDEQ) of construction certification:

UNCONSTRUCTED AREA(S) WITH FINANCIAL ASSURANCE: The area(s) identified as Cells 208 (18.5 acres) and 5B (8.3 acres), totaling 26.8 acres, are included in the calculation of financial assurance as required by Section 11523 of Part 115. This portion(s) of the Facility shall be authorized to receive waste, as part of this license, when acceptable certification is submitted to the MDEQ, as required by Section 11516(5) of Part 115, and determined by the MDEQ to be consistent with Part 115 and the administrative rules. The certification shall verify that construction of this area(s) was in accordance with the Construction Permit(s) listed in Item 8 of this license, Part 115, and the administrative rules implementing Part 115.
4. The following portions of the Facility are **NOT** authorized to receive solid waste by this license:
 - a. **UNCONSTRUCTED AREA(S) WITHOUT FINANCIAL ASSURANCE:** The area(s) identified as Cells 212, 213, 302 through 309, and 6B through 7B are not constructed and are not included in the calculation of financial assurance as required by Section 11523 of Part 115. This area's total acreage is 163.15 acres.
 - b. **CLOSED UNIT(S) OR A PORTION OF A UNIT WHERE THE FINAL COVER HAS BEEN CERTIFIED CLOSED AND ACCEPTED BY THE MDEQ:** The following unit(s) and/or portion(s) are closed:

EXISTING UNIT(S): The unit(s) identified as portions of Cells 1A (0.82 acres), 2A (0.16 acres), 201 (4.65 acres), 202 (4.56 acres), 205 (1.12 acres), 1B (4.25 acres), and 2B (0.84 acres) had final closure certified on September 27, 2001. This certification was reviewed and approved by the MDEQ on May 11, 2004. This area's total acreage is 16.4 acres.
5. The attached map (Attachment A) shows the Facility, the area permitted for construction, monitoring points, leachate storage units, site roads, other disposal areas, and related appurtenances.
6. Issuance of this license is conditioned on the accuracy of the information submitted by the Applicant in the Application for License to Operate a Solid Waste Disposal Area (Application) received by the MDEQ on April 11, 2008, and any subsequent amendments. Any material or intentional inaccuracies found in that information is grounds for the revocation or modification of this license, and may be grounds for enforcement action. The licensee shall inform the MDEQ's Waste and Hazardous Materials Division, Southeast Michigan District Supervisor, of any inaccuracies in the information in the Application upon discovery.
7. This license is issued based on the MDEQ's review of the Application, submitted by Republic Services of Michigan I, LLC, for the Carleton Farms Landfill, dated April 10, 2008, and revised July 24, 2008. The Application consists of the following:
 - a. Application Form EQP 5507.
 - b. Application fee in the amount of \$15,000.00.
 - c. Certification of construction by NA.

Licensee: Republic Services of Michigan I, LLC
Facility Name: Carleton Farms Landfill
Operating License Number: 9182
Issue Date: July 29, 2008

d. Waste Characterization: N/A.

e. Restrictive Covenant:

The Carleton Farms Landfill restrictive covenant on 494.57 acres is on file at the Wayne County Register of Deeds recorded on March 26, 2001, as Liber 33490 pages 398-404. A copy is on file with the MDEQ.

f. Perpetual Care Fund Agreement, established as an escrow account, signed by Mr. David Barclay, Vice President, Republic Services of Michigan I, LLC on January 19, 1999, was executed by the MDEQ on February 11, 1999.

g. Financial Assurance.

i. Financial Assurance Required:

The amount of financial assurance required for this Facility was calculated based on the calculation worksheet form EQP 5507A entitled, "Form A Financial Assurance Required," and is \$30,596,788.00.

The Facility has provided financial assurance totaling \$30,596,788.00, based on the requirements of Section 11523 of Part 115, consisting of a combination of the Perpetual Care Fund established under Section 11525, bonds, and the financial capability of the Applicant as evidenced by a financial test. The financial assurance mechanisms used by the Facility are summarized below in items ii and iii, respectively.

ii. Financial Assurance Provided Via a Perpetual Care Fund:

- (1) The amount of the required financial assurance can be reduced pursuant to Section 11524 of Part 115, if the amount of money in the Perpetual Care Fund plus the amount of the reduced financial assurance equals the amount of financial assurance required in Section 11523 and is approved by the MDEQ.
- (2) The Perpetual Care Fund Agreement statement showed a balance of \$1,782,830.85 in the Facility's Perpetual Care Fund as of June 30, 2008. Of this amount, the MDEQ has granted the request to use \$1,775,065.00 toward the total amount of financial assurance required.

iii. Financial Assurance provided via bond:

The following financial assurance has been received from the Applicant to meet the amount of financial assurance required:

Irrevocable Letter of Credit	\$28,821,723.00
------------------------------	-----------------

Total Amount Received:	\$28,821,723.00
------------------------	-----------------

iv. Financial Assurance Updates Required:

For Type II landfills, the financial assurance cost estimates of closure and post-closure activities must be updated annually and the corresponding requisite amount of financial assurance must be adjusted annually for the costs of inflation. The corresponding financial assurance, as adjusted for inflation and other factors, is due on July 29, 2009, and each year thereafter.

8. The following documents approved with Construction Permit Number(s) 0244, 0316, and 0351 issued to Carleton Farms, Inc., on August 30, 1991, March 14, 1995, and June 16, 1997, respectively, and Construction Permit Numbers 0383 and 4078 issued to Republic Services of Michigan I, LLC on July 11, 2000, and June 12, 2006, respectively, are incorporated in this license by reference:

a. Construction Permit Number 0244.

i. Carleton Farms, Inc., Act 641 Construction Permit Application, Volumes I-III, dated April 1991.

Licensee: Republic Services of Michigan I, LLC
Facility Name: Carleton Farms Landfill
Operating License Number: 9182
Issue Date: July 29, 2008

- ii. Report on Hydrogeologic Investigation Proposed Sanitary Landfill, Sumpter Township, dated October 31, 1989.
 - iii. Report on Supplemental Hydrogeological Investigation, dated November 7, 1990.
 - iv. Soil Erosion and Sedimentation Control Plan, dated March 1991.
 - v. Soil engineering documentation, dated April 1991.
 - vi. Design engineering documentation, dated March 26, 1991.
 - vii. Engineering plans, dated March 26, 1991.
- b. Construction Permit Number 0316.
- i. Carleton Farms, Inc., Act 641 Construction Permit Application, Volumes I-IV, dated October 1994.
 - ii. Hydrogeological report titled, "Report on Additional Hydrogeological Investigation, Act 641 Landfill Expansion, Carleton Farms, Inc.," prepared by NTH Consultants, Ltd. (NTH), and dated February 24, 1993, and amendments on October 12, 1994, and January 9, 1995, by NTH.
 - iii. Engineering report titled, "Engineering Report, Construction Permit Plans Phase II, Carleton Farms, Inc.," prepared by Midwestern Consulting, Inc., and dated May 27, 1994.
 - iv. Engineering plans titled, "Carleton Farms, Inc., Act 641 Construction Permit Plans, Type II Sanitary Landfill," prepared by Midwestern Consulting, Inc., and dated January 8, 1993, for sheets 1-5, 17-21, 26, and 27, and dated September 8, 1994, for sheets 14-16, 22-25, and 28-39.
- c. Construction Permit Number 0351.
- i. Carleton Farms, Inc., Part 115 Construction Permit Application, Phase III Expansion, Volumes I-IV, dated February 1997.
 - ii. Hydrogeologic report contained in Volume 3 of the document described in Item 8.c.i, dated February 1997, and amended May 21, 1997.
 - iii. Hydrogeological monitoring plan titled, "Hydrogeological Monitoring Program, Carleton Farms, Inc.," prepared by City Management Corporation, dated September 1994 and amended June 7, 1995, May 20, 1997, September 1997, May 18, 2001, June 26, 2002, and March 30, 2004, contained in Volume 4 of the document described in Item 8.c.i.
- d. Construction Permit Number 0383.
- i. Carleton Farms, Inc., Part 115 Construction Permit Application, Phase III Expansion, Volumes I-V, dated February 1997 (this document from Construction Permit Number 0316 was referenced as part of the Construction Permit Number 0383 application documents.)
 - ii. "Response to MDEQ engineering comments, Phase II Construction Permit Application" prepared by NTH, and dated May 21, 1997.
 - iii. Sheets 1-32 of the engineering drawings prepared by NTH titled "Carleton Farms, Inc., Part 115 Construction Permit Plans, Phase III Expansion," dated February 14, 1997, and received May 21, 1997.
 - iv. Revised engineering drawing sheet Number 27 prepared by EMCON titled "Phase III – Permit Plans Liner and Final Cover System Details," dated March 15, 2000.
 - v. Revised engineering drawing sheet Number 20 prepared by EMCON titled "Phase III – Permit Plans Revised Final Grading Plan," dated March 14, 2000.
 - vi. Revised specifications for the granular soils as outlined on revised pages 42-44 submitted to the MDEQ on March 16, 2000, and to be incorporated into the Construction Quality Assurance Manual contained in the document listed in Item 8.d.i.
- e. Construction Permit Number 4078.
- i. Document titled "Application for Lateral & Vertical Expansion, Carleton Farms Landfill, Sumpter Township, Michigan," Volumes 1 and 2, prepared for Republic Services of Michigan I, LLC, by Shaw Environmental, Inc., dated January 2006 (received January 24, 2006), with revisions dated February 8, 2006 (received February 9, 2006), May 8, 2006 (received May 8, 2006), and May 16, 2006 (received May 18, 2006).

Licensee: Republic Services of Michigan I, LLC
Facility Name: Carleton Farms Landfill
Operating License Number: 9182
Issue Date: July 29, 2008

- ii. Engineering drawings, numbered 1 through 33, in plan set titled "Design Plans for Phase IV Expansion, Carleton Farms Landfill, Sumpter Township, Wayne County, Michigan," prepared for Republic Services of Michigan I, LLC, by Shaw Environmental, Inc., dated January 2006 (received January 24, 2006), with revisions dated February 8, 2006 (received February 9, 2006), May 8, 2006 (received May 8, 2006), and May 16, 2006 (received May 18, 2006).
9. The following additional documents, approved since the issuance of the construction permit(s) referenced in Item 8, are incorporated in this license by reference:
 - a. Construction Certification for Geosynthetics, Leachate Collection System and Protective Sand Layer, Cell 1A, Carleton Farms, Inc., Volumes I-III, dated July 14, 1992.
 - b. Construction Certification for Earthwork, Cell 1A, Volumes I-III, dated July 8, 1992.
 - c. Carleton Farms, Inc., Cell A As-Built Drawings and Limits of Licensed Area (8 sheets), dated July 23, 1992.
 - d. Construction Certification for Geosynthetics, Leachate Collection Systems and Protective Sand Layer, Cells 2A and 3A, Carleton Farms, Inc., Volumes I-3, dated December 18, 1992.
 - e. Construction Certification for Earthwork, Cells 2A and 3A, Volumes I and II, dated November 1992.
 - f. Cells 2A and 3A, As-Built Drawings and Limits of Licensed Area (6 sheets), dated December 15, 1992.
 - g. Construction Certification for Geosynthetics, Leachate Collection System, and Protective Sand Layer, Cells 4A and 5A, Volumes I and II, dated June 1993.
 - h. Construction Certification for Earthwork, Cells 4A and 5A, Carleton Farms, Inc., dated June 1993.
 - i. Cells 4A and 5A, Record Drawings and Limits of Licensed Area (6 sheets), dated June 30, 1993.
 - j. Construction Certification for Geosynthetics, Leachate Collection and Protective Sand Layer, Cell 6A, Carleton Farms, Inc., dated September 1993.
 - k. Construction Certification for Earthwork, Cell 6A, Carleton Farms, Inc., dated September 1993.
 - l. Cell 6A Record Drawings, Limits of Licensed Area and Record Facility Drawings, dated August 20, 1993.
 - m. Construction Certification for Geosynthetics, Leachate Collection System, and Protective Sand Layer, Act 641 Type II Sanitary Landfill, Municipal Solid Waste Incinerator Ash Cell, Cell 1B, Volumes I and II, dated January 1994.
 - n. Construction Certification for Earthwork, Act 641 Municipal Solid Waste Incinerator Ash Cell, Cell 1 B, Carleton Farms, Inc., dated November 1993.
 - o. Addendum to Construction Certification for Earthwork, Act 641 Municipal Solid Waste Incinerator Ash Cell, Cell 1B, Carleton Farms, Inc., dated February 1994.
 - p. Monofill Ash Cell 1B, Record Drawings and Limits of Licensed Area (7 sheets), dated January 4, 1994.
 - q. Construction Certification for Geosynthetics, Leachate Collection System, and Drainage/Protective Sand Layer, Cells 201 and 202, Carleton Farms, Inc., Volumes I-IV, dated April 1994.
 - r. Cells 201 and 202, Record Drawings and Limits of Licensed Area (10 sheets), dated April 20, 1994.
 - s. Construction Certification for Earthwork and Geosynthetics, Cell 203, Volumes I and II, dated November 1994.

Licensee: Republic Services of Michigan I, LLC
Facility Name: Carleton Farms Landfill
Operating License Number: 9182
Issue Date: July 29, 2008

- t. Construction Certification for Earthwork and Geosynthetics, Cell 205, Volumes I-III, dated November 1994.
- u. Cells 203 & 205, Record Drawings and Limits of Licensed Area (10 sheets), dated October 28, 1994.
- v. Operational Procedures for Alternate Daily Cover Materials, dated May 1995.
- w. Construction Certification for Earthwork and Geosynthetics, Cell 206, Volumes I and II, dated December 4, 1995.
- x. Construction Certification for Earthwork and Geosynthetics, Cell 2B, Volumes I and II, dated December 1995.
- y. Monofill Ash Cell 2B, Record Drawings and Limits of Licensed Area (7 sheets), dated January 8, 1996.
- z. Construction Certification for Earthwork and Geosynthetics, Cell 204 and 301, Volumes I and II, dated December 1997.
- aa. Cells 204 and 301, Record Drawings and License Areas (6 sheets), dated December 1997.
- bb. Letter dated March 16, 2000, from EMCON/OWT Solid Waste Services titled "Request for Construction Permit Modification, Carleton Farms Landfill, Ash Cells 3B-7B Leachate Collection Layer."
- cc. Guidance document for Prevention of Prohibited Waste Disposal at Municipal Solid Waste Landfills prepared for Carleton Farms Landfill, Inc., dated November 1996 and revised June 1998, November 1998, October 1999, July 2002, and April 2005.
- dd. "Municipal Solid Waste Incinerator Ash Management Plan," dated August 29, 2000.
- ee. Final Cap Design Changes Request by EMCON/OWT, dated October 17, 2000.
- ff. Carleton Farms Inc., Ash Monofill Cell 3B Construction Certification Report, received July 18, 2000.
- gg. Landfill Gas System Construction Drawings submittal, dated June 25, 2001.
- hh. 2000 MSW Cell Closure dated September 2001 and prepared by EMCON/OWT.
- ii. 2000 Ash Cell Closure dated September 2001 and prepared by EMCON/OWT.
- jj. Design Change Request for Leachate Collection System, letter dated February 25, 2002, with engineering plan sheet titled "Leachate Collection Details," dated February 25, 2002.
- kk. Construction Documentation Report, Cell 209 South, dated March 2002.
- ll. Cells 210-211 South Construction Documentation Report, Volumes 1 and 2, dated August 2002 and prepared by CTI and Associates, Inc.
- mm. Cells 209-211 North Construction Documentation Report dated September 2003 and prepared by CTI and Associates, Inc.
- nn. "Ash Cell 4B Construction Documentation Report," prepared by CTI and Associates, Inc., dated August 2004, received by the MDEQ on May 24, 2004, and approved by the MDEQ on October 22, 2004.
- oo. "Documentation Report for the Landfill Gas Extraction Well Remediation," dated November 30, 2000, and revised on March 24, 2005.
- pp. "Documentation Report for the 2001 Landfill Gas Extraction Well Remediation," dated February 7, 2002, and revised on March 24, 2005.

Licensee: Republic Services of Michigan I, LLC
Facility Name: Carleton Farms Landfill
Operating License Number: 9182
Issue Date: July 29, 2008

- qq. Document titled "Carleton Farms Landfill Ash Monofill Leachate Line Rehabilitation Revised Work Plan," dated August 2, 2005.
- rr. Document titled "Supplemental Ash Monofill Leachate Line Work Plan, Landfill Gas to Energy Plant Area," dated August 18, 2005.
- ss. Design summary titled, "Carleton Farms Landfill – Leachate Storage Tank Design Summary," dated September 26, 2005, and submitted to the MDEQ with a transmittal letter dated October 3, 2005.
- tt. Engineering plan sheets 1 through 4 titled, "Carleton Farms Landfill, Leachate Storage Tank Design, June 2005, updated October 2005," originally dated August 1, 2005, with revisions dated October 3, and 28, 2005.
- uu. Engineering drawing number 1, prepared by Shaw Environmental, Inc., titled "Cap Alteration Details," dated August 30, 2004, with revisions dated October 20, 2005, and April 3, 2006.
- vv. The engineering document titled "Landfill Gas Collection and Control System Design Plan, Carleton Farms Landfill, Sumpter Township, Michigan," dated June 2006.
- ww. Drawings numbered 1 through 5 of the engineering plan set titled "Plans for the Landfill Gas Collection and Control System Design Plan, Carleton Farms Landfill," dated July 2004 with revisions dated January 31, 2006 (Drawing Number) and April 27, 2006 (Drawings Numbered 3, 4, and 5) and Drawing Number 1 titled "MSW Disposal Area, Isopach (Thickness) of Remaining Permitted Airspace as of April 20, 2006," dated June 6, 2006, and submitted in response to MDEQ comments, dated April 10, 2006, regarding the Landfill Gas Collection and Control System Design Plan referenced in Item 9 vv.
- xx. Document titled "Carleton Farms Landfill Hydrogeologic Monitoring Plan," prepared by Golder Associates, dated November 2005, and approved by the MDEQ with Construction Permit Number 4078 on June 12, 2006.
- yy. Engineering plan set titled "Vertical Leachate Sump Manholes, Cells 209, 210, and 211, Carleton Farms Landfill, Sumpter Township, Wayne County, Michigan," dated August 2006, and submitted to the MDEQ with a transmittal letter from Republic Services, Inc., dated September 18, 2006.
- zz. Document titled "Verification of Soil Cleanup" prepared by Golder Associates, dated September 15, 2006, and submitted to the MDEQ with a transmittal letter dated September 22, 2006.
- aaa. Engineering plan sheet 1 titled "Proposed West Slope Landfill Gas Horizontal Collection System Expansion" prepared by Golder Associates, dated September 29, 2006, and submitted to the MDEQ with a transmittal letter dated October 2, 2006.
- bbb. Submittal titled "Carleton Farms Landfill Cell 207 Design Changes" prepared by Cornerstone Environmental Group, LLC, dated October 19, 2006, and received by the MDEQ on October 20, 2006, including sheet number 26R, and sheet number 26R1 which revise/supplement the engineering plan set titled "Design Plans for Phase IV Expansion, Carleton Farms Landfill," dated January 2006.
- ccc. Document titled, Carleton Farms Landfill, Sumpter Township, Wayne County, Michigan, Gas Collection Plan," dated June 2006 and revised November 2006 and January 2007.
- ddd. The engineering plan set (Sheets 0 through 3) titled "2007 Landfill Gas System Upgrade, Collection System Expansion, Carleton Farms Landfill, Sumpter Township, Wayne County, Michigan," prepared by Golder Associates, Inc., dated January 2007, and received by the MDEQ on January 22, 2007.
- eee. Engineering plan set (Sheets 1 through 5) titled "Carleton Farms Landfill, Proposed Citizen's Drop-Off, Truck Wheel Wash and Road Improvements Construction Drawings," prepared by McNeely & Lincoln Associates, dated November 2006 and revised May 15, 2007.

Licensee: Republic Services of Michigan I, LLC
Facility Name: Carleton Farms Landfill
Operating License Number: 9182
Issue Date: July 29, 2008

- fff. "Cell 207 Construction Documentation Report," prepared by CTI and Associates, Inc., dated February 2007 and revised June 2007.
 - ggg. Certification document titled "Cell 207 Geomembrane Repairs" prepared by CTI and Associates, Inc., dated July 20, 2007, and received by the MDEQ on July 23, 2007.
 - hhh. Certification document titled "East Slope Cap Alteration" prepared by CTI and Associates, Inc. dated May 21, 2007, with revisions dated August 15, 2007.
 - iii. Certification document titled "Cell 207 Geomembrane Repairs" prepared by CTI and Associates, Inc., dated September 4, 2007, and received by the MDEQ on September 5, 2007.
 - jjj. A work plan, required by WHMD Order No. 115-02-07, titled "West Slope Area Monitoring Plan For: Carleton Farms Landfill, Sumpter Township, Wayne County, Michigan" dated July 20, 2007, with revisions/responses to MDEQ comments dated September 21, 2007.
 - kkk. "Hydrogeologic Monitoring Plan" prepared by Golder Associates, dated May 2007 and revised September 2007.
 - lll. "Statistical Monitoring Plan" prepared by Golder Associates, dated May 2007 and revised September 2007.
 - mmm. Engineering plan set (sheets 1 through 3) titled "Carleton Farms Landfill, Proposed Truck Parking Area Construction Drawings" prepared by McNeely & Lincoln Associates, dated October 2007 and submitted to the MDEQ with a transmittal letter dated November 5, 2007.
 - nnn. Document titled "Perimeter Landfill Gas Monitoring Plan, Carleton Farms Landfill" prepared by Golder Associates, dated April 2007 and revised December 2007.
 - ooo. Engineering document titled "Settlement Analysis - Ash Cell 5B," prepared by Cornerstone Environmental Group, dated April 24, 2008, and received by the MDEQ under a transmittal letter dated April 25, 2008, including figure no. 1 titled "Ash Cell 5B Settlement Point Locations," dated April 17, 2008, and received by the MDEQ on June 16, 2008.
 - ppp. Sheet Number 5B titled "5B Permit Design Changes Liner/Berm Details," prepared by Cornerstone Environmental Group, dated June 13, 2008, and received by the MDEQ on June 16, 2008, under a transmittal letter dated June 13, 2008.
 - qqq. Sheet No. 6 titled "5B Permit Design Changes Leachate Collection Details," prepared by Cornerstone Environmental Group, dated June 13, 2008, and received by the MDEQ on June 16, 2008, under a transmittal letter dated June 13, 2008.
 - rrr. Revised sheet No. 18 of the engineering plan set (Design Plans for Phase IV Expansion, Carleton Farms Landfill) previously approved on June 12, 2006, re-titled "5B Permit Design Changes Top of Liner Plan," prepared by Cornerstone Environmental Group, dated June 13, 2008, and received by the MDEQ on June 16, 2008, under a transmittal letter dated June 13, 2008.
 - sss. Revised Sheet No. 19 of the engineering plan set (Design Plans for Phase IV Expansion, Carleton Farms Landfill) previously approved on June 12, 2006, re-titled "5B Permit Design Changes Leachate Collection System," prepared by Cornerstone Environmental Group, dated June 13, 2008, and received by the MDEQ on June 16, 2008, under a transmittal letter dated June 13, 2008.
10. Consent Order/Judgment Number: Consent Order Numbers WHMD Order No. 115-02-06 and 15-02-07 entered on June 9, 2006, and June 22, 2007, respectively, are incorporated into this license by reference.
11. The licensee shall repair any portion of the certified liner or leachate collection system which is found to be deficient or damaged during the term of this license unless determined otherwise by the MDEQ.

Licensee: Republic Services of Michigan I, LLC
Facility Name: Carleton Farms Landfill
Operating License Number: 9182
Issue Date: July 29, 2008

12. The licensee shall have repairs to any portion of the certified liner or leachate collection system recertified by a registered professional engineer in accordance with R 299.4921 of Part 115 and approved by the MDEQ before receiving waste in that portion of the certified liner or leachate collection system. The licensee shall submit the recertification to the MDEQ's Waste and Hazardous Materials Division, Southeast Michigan District Supervisor, for review and approval.
13. The licensee shall conduct hydrogeological monitoring in accordance with the approved hydrogeological monitoring plan, dated May 2007 and revised September 2007. The sampling analytical results shall be submitted to the MDEQ's Waste and Hazardous Materials Division, Southeast Michigan District Office.
14. Modifications to the approved hydrogeological monitoring plan referenced in Item 13 may be approved, in writing by the Waste and Hazardous Materials Division, Southeast Michigan District Supervisor. Proposed revisions must be submitted in a format specified by the MDEQ.
15. Leachate may be recirculated if a leachate recirculation plan has been approved, in writing, by the Waste and Hazardous Materials Division, Southeast Michigan District Supervisor.
16. Modifications to approved engineering plans that constitute an upgrading, as defined in R 299.4106a(l), may be approved, in writing, by the Waste and Hazardous Materials Division, Southeast Michigan District Supervisor.
17. Requests for alternate daily cover may be approved, in writing, by the Waste and Hazardous Materials Division, Southeast Michigan District Supervisor.
18. Leakage Control Criteria:

The active portions of the unit(s) authorized to receive waste by this license is a monitorable unit(s) which is located over a natural soil barrier and which is in compliance with the provisions of R 299.4422(2).

19. **VARIANCES:** None.

20. **SPECIAL CONDITIONS:**

- a. The licensee shall place a compacted layer of not less than six inches of earthen material, unless an exemption is granted, of suitable cover material on all exposed solid waste by the end of each working day, as required by R 299.4429(l). Suitable cover shall be either uncontaminated soil or an alternate cover approved by the Waste and Hazardous Materials Division, listed in Item i below. Alternate cover shall be restricted as indicated in Item ii and applied as per the approved operational plan submitted by the licensee.

- i. Approved alternate cover shall be any of the following:

<u>Product/Waste Material</u>	<u>Source</u>	<u>Monthly Volume</u>
(1) Class A		
(a) Fabrisoil	Phillips Fibers Corporation	N/A
(b) Sanifoam	3M Company	N/A
(c) Concover	Newastecon, Inc.	N/A
(d) Procover	Nicolan Corporation	N/A
(e) Amoco 2001 and Amoco 2006	Amoco Oil Company	N/A
(f) Rus Foam	Rusmar Incorporated	N/A
(g) Envirofoam	Environmental Systems Ltd	N/A
(h) Plastic Sheeting		
(i) Geotextile		
(j) Woven Mat		
(k) Spray-on Materials		

(2) Class B

Licensee: Republic Services of Michigan I, LLC
 Facility Name: Carleton Farms Landfill
 Operating License Number: 9182
 Issue Date: July 29, 2008

(a) Alum sludge		
(b) Wood Chips		
(c) Chipped Tires		
(d) Bottom Ash		
(e) Ground Shingles w/no fines		
(f) Non-Marketable Compost material which is stabilized and finished.	Carleton Farms, Inc., Compost Facility	N/A
(g) N-Viro Soil		
(h) Casting Sands	Dundee Castings Company	2,000 cu yds
(i) Construction Soils	Art Van Warehouse, Sterling Heights	N/A

(3) Class C

(a) Petroleum Contaminated Soils		
(b) Automobile Shredder Fluff	Triple M Metals Fritz Enterprises/Huron Valley Steel Ferrous Processing & Trading Company Metals Recycling - Johnston, RI Prolerized New England - Everett, MA OmniSource Corp. - Toledo, OH United Iron and Metal - Baltimore, MD	122,000 cu yds from all sources combined

ii. The above materials are approved for daily cover when used in the following manner:

- (1) The licensee shall use the material as daily cover only. The material cannot be used for road building or fill in other areas of the Facility's operation.
- (2) The licensee shall maintain written authorization on site, from the generator of the material, to use the material as daily cover.
- (3) If the material is a waste stream that may change in composition over time, the licensee must maintain records of any additional testing necessary to verify that the material remains compliant with R 299.4429 and Operational Memo 115-10 Revision 1. If additional/revised criteria for alternate daily cover materials are developed/adopted by the MDEQ, the licensee is responsible for ensuring that approved materials meet all applicable criteria.
- (4) The licensee shall only stockpile material in a secure manner within the active cell.
- (5) This approval does not preclude the licensee from disposing of the material as waste in the active fill area instead of using the material as daily cover.
- (6) This approval shall immediately become void upon documentation by the MDEQ that the alternate cover is not being used in accordance with listed conditions, that the alternate cover is not providing the necessary protection, or that the process producing the waste has changed.
- (7) If the material does not meet the guidelines from Attachment 2 of Operational Memo 115-10 Revision 1 for non-volatiles, the licensee shall ensure that fugitive dust emissions from this material do not occur. Acceptable methods to assure fugitive emissions do not occur are:
 - (a) Implement a schedule to wet down material; or
 - (b) Cover the material with a tarp; or
 - (c) Apply an approved foam or other appropriate commercial dust control product.

Licensee: Republic Services of Michigan I, LLC
Facility Name: Carleton Farms Landfill
Operating License Number: 9182
Issue Date: July 29, 2008

- (8) The material must be stored and expended in a manner which will prevent fires from igniting in the material.
- (9) This approval to use alternate cover shall expire upon the expiration of this operating license.
- b. Alternate cover shall be applied as per the Facility's Operational Procedures for Alternative Daily Cover Materials, dated May 1995, amended June 7, 1995, and approved by the Department on June 7, 1995. The licensee shall also apply alternate daily cover materials (ADCM) according to the operational plan for ADCM, dated November 1995.
- c. The primary leachate collection system for any active ash monofill cells shall be sampled in accordance with the approved Municipal Solid Waste Incinerator Ash Management Plan, dated August 29, 2000.
- d. The licensee shall notify the MDEQ within 48 hours of the occurrence of any fire at the Facility or any waste mass movement or settlement which may be indicative of instability, and shall place such notifications in the Facility's operating record.
- e. In accordance with Construction Permit Number 4078, the applicant will upgrade all unconstructed areas (excluding the vertical expansion) to account for the effects of consolidation settlement on the leachate collection pipes. Calculations must be provided to document that the bottom slope of the leachate collection pipes will be a minimum of 1 percent (in a direction to intercept liquid flow) after consolidation settlement. The necessary revised engineering documents and drawings must be submitted to the Southeast Michigan District Office, Waste and Hazardous Materials Division, for review and approval prior to construction.
- f. In accordance with the Stipulations of WHMD Order No. 115-02-06, upon acceptance of wastewater treatment plant (WWTP) sludge, the licensee agrees to implement a contingency provision that if notified by the MDEQ, there have been two verified off-site odors within a 30 day period, the amount of WWTP sludge to be received at the disposal area shall be reduced by 20 percent of the daily average volume of the previous 30 day period. Further, each time there is a subsequent notification to the licensee by the MDEQ that there have been two (2) additional verified off-site odors in a 30-day period as a result of WWTP sludge disposal at the disposal area, the volume of the WWTP sludge being accepted at the disposal area shall be reduced by an additional 20 percent of the daily average volume of WWTP sludge accepted in the previous 30 day period.

A "verified off-site odor" shall mean an odor that is determined by staff from the MDEQ or from Wayne County Department of Environment (WCDOE) to be from WWTP sludge at a level 2 or above based on the scale used by WCDOE and such odor is present off the landfill site at a location where people reside, or are reasonably expected to be found such that the odor would cause unreasonable interference with the comfortable enjoyment of life and property.

If the licensee has been required to reduce the volume of WWTP sludge in accordance with the contingency described above, the licensee may request to increase the volume of WWTP sludge for acceptance up to the volumes previously approved by the MDEQ in a WWTP Sludge Acceptance Plan by submittal of the following:

- 1. A certification from the licensee that in the most recent 90 days prior to making the request, the licensee has not received notification from the MDEQ or the WCDOE that there have been two or more verified off-site odors in any 30 day period within the 90 days, unless the MDEQ Director determines otherwise.
- 2. Information on the volumes to be accepted and details on what has changed either in terms of the WWTP sludges themselves or landfill practices or other circumstances, such that increasing the volume of WWTP sludge accepted is not likely to result in verified odors from the increased volumes.
- g. In accordance with the Stipulations relative to paragraph 2.3 of WHMD Order No. 115-02-07, upon MDEQ and WCDOE approval of the Leachate Recirculation Plan (described in paragraph 2.2 of WHMD Order No. 115-02-07), the Leachate Recirculation Plan shall be implemented in accordance with the provision contained therein.
- h. In accordance with the Stipulations relative to paragraph 2.7 of WHMD Order No. 115-02-07, in the event that the Respondent makes future application to the MDEQ and the WCDOE to reinstate the WWTP sludge at the disposal

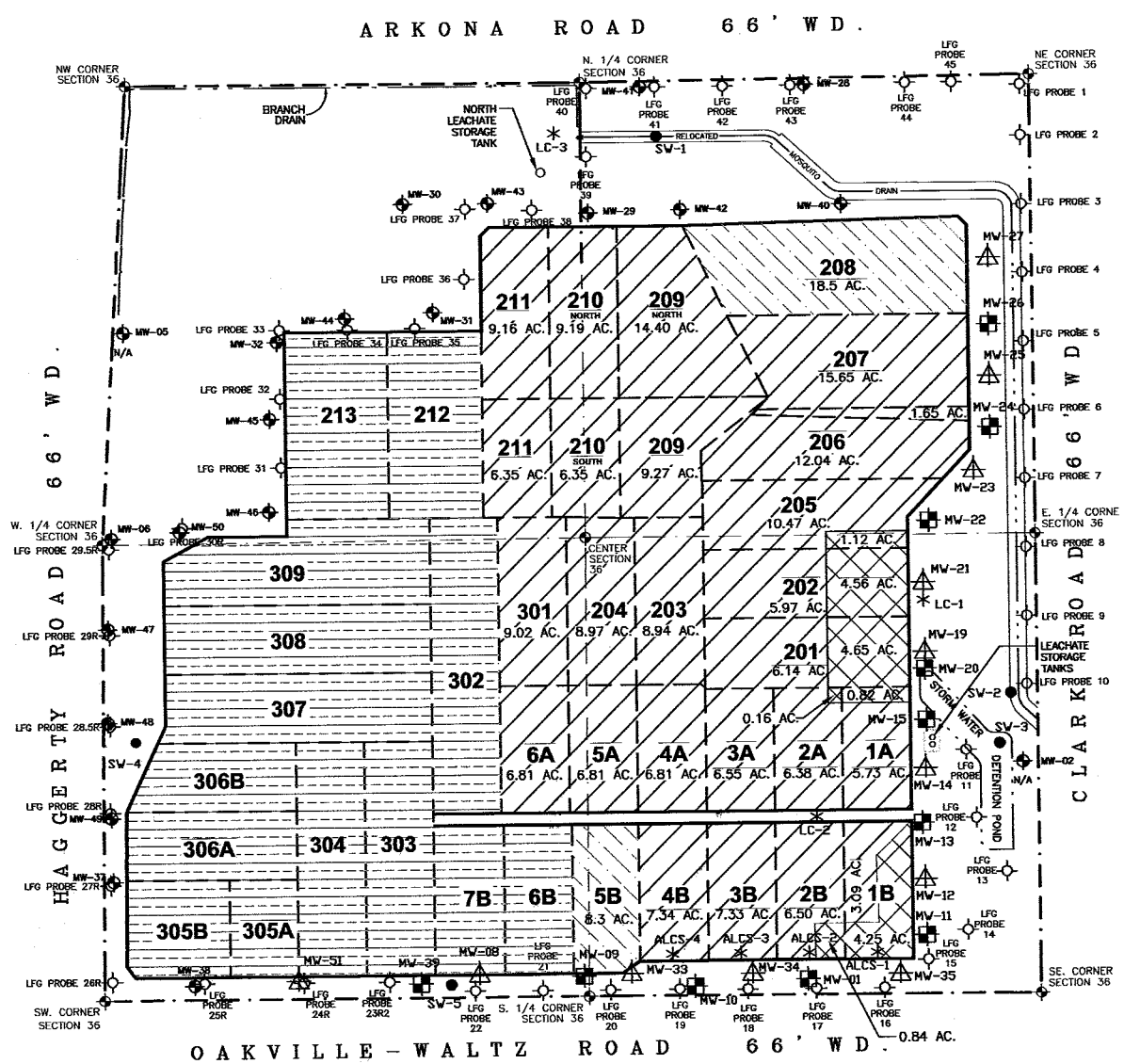
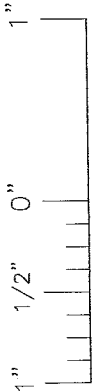
Licensee: Republic Services of Michigan I, LLC
Facility Name: Carleton Farms Landfill
Operating License Number: 9182
Issue Date: July 29, 2008

area under Sections 2.6 and 2.7 of WHMD Order Number 115-02-06, the Respondent shall include an evaluation of the anticipated effects of the disposal of WWTP sludge on the stability of the waste mass. The evaluation must consider the findings of the West Slope Stability Evaluation to compare the conditions in the West Slope Area to the anticipated conditions resulting from future sludge disposal and any leachate recirculation. The evaluations must demonstrate that stability will be maintained under intermediate and final construction scenarios considering at a minimum:

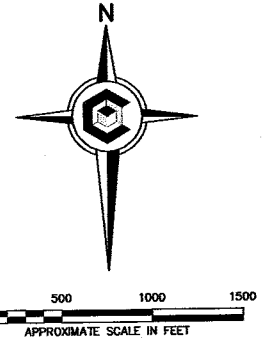
1. The volume of sludge to be disposed;
 2. The moisture content of the sludge;
 3. The tested and estimated strength of the waste materials relative to slope stability calculations, hydraulic conductivity, and consolidation properties of the materials; and
 4. The method of disposal of the sludge.
21. **TERM:** This license shall remain in effect until its expiration date, unless revoked or continued in effect, as provided by, the Administrative Procedures Act, 1969 PA 306, as amended, or unless superseded by the issuance of a subsequent license.

END OF LICENSE

File: J:\CARLETON FARMS - AREAS FOR 2007 LICENSE - 060200\PROJECT DRAWINGS\FHCF-AREAS 040108.dwg Layout: Layout1 User: jason.whitman Apr 07, 2008 - 3:03pm



- LEGEND**
- FACILITY PROPERTY BOUNDARY
 - APPROXIMATE SOLID WASTE BOUNDARY
 - CELL BOUNDARY
 - 1** CELL DESIGNATION
 - PARTIALLY CLOSED CELLS
 - ACTIVE CELLS
 - UNCONSTRUCTED CELLS w/FINANCIAL ASSURANCE
 - UNCONSTRUCTED CELLS w/o FINANCIAL ASSURANCE
 - MW-XX
 - MW-XX
 - MW-XX
 - MW-XX
 - SW-X
 - LC-X
 - LFG PROBE XX
 - MOSQUITO DRAIN AND DESBROW DRAIN
 - PIEZOMETER
 - UPGRADIENT MONITORING WELL
 - DOWNGRADIENT WELL TO BE SAMPLED FIRST AND THIRD QUARTERS
 - DOWNGRADIENT WELL TO BE SAMPLED SECOND AND FOURTH QUARTERS
 - SURFACE WATER SAMPLE LOCATION
 - LEACHATE COMPOSITE SAMPLE LOCATION
 - ACTIVE LANDFILL GAS PROBE



This drawing represents intellectual property of Cornerstone Environmental Group, LLC. Any modification to the original by other than Cornerstone Environmental Group, LLC personnel without its written permission and as such is prohibited. Cornerstone Environmental Group, LLC will not be held liable for any damages made to this document without written consent of the originator.

DATE 04/07/08
DWN TAD
APP JGW
REV
PROJECT NO. 060200

ATTACHMENT A
REPUBLIC SERVICES OF MICHIGAN I, LLC
CARLETON FARMS LANDFILL
SUMPTER TOWNSHIP, WANYE COUNTY, MICHIGAN
SITE PLAN